

tion of individual beauties, we perceive with delight, that of such the graceful curvature of the street presents a new one at almost every step."

I admit that many of the finest cities have been partly built by nature, which had a great deal to do materially and directly with the formation of the streets, and with their architectural beauty; where the main charm may be traced to the original form of the ground, and nature might be said to have laid out the foundation. It was given as the opinion of Lady M. W. Montague, and noticed approvingly as such by Sir W. Scott, that the most interesting district of every country, and that which exhibits the beauties of natural scenery in greatest perfection, is that where the mountains sink down upon the champaign, or more level land: now the same principle operates in towns and cities in reference to the architecture; for a similar relative position of the ground imposes forms on streets which present the beauties of architecture in greatest perfection, giving a charm to the various buildings which they would not otherwise possess. The pyramidal principle is one of the secrets of beauty in architectural grouping, causing each object or a mass of objects to increase in lightness and elegance as it rises in the air, and recedes from the eye. "The nature of picturesque composition," says Fuseli, "is depth, or to come forward and recede," and this description of grouping is much aided by an undulating character of ground. The side of a hill as the site for a city is thus favourable for the production of fine architectural effects, as may be seen at Bath and Edinburgh, where the houses rise one above another, and show themselves in every variety of relative position. The situation of Constantinople, upon small hills, naturally produces this pyramidal composition, and the effect of it as described by travellers is magical.

In short, the more the works of man are modified by natural circumstances of situation and scenery, and the more the architect takes advantage of such circumstances, or is guided by them, the more beautiful and picturesque they will be."

SAMUEL HUGGINS.

MAY THE GREEK DORIC BE TRACED BACK TO EGYPT?

Owing to my absence from London in a remote part of Wales, I have but just now seen the account of the meeting of the Institute of Architects on the 21st of May, in THE BUILDER of the 26th. Perhaps it may be still not too late to offer a few remarks on the main subject of debate on that evening, viz., "May the Greek Doric be traced back to Egypt?"

The tombs of Beni Hassan, seen in the cliffs of the Nile, were the monuments on which the discussion chiefly turned. These tombs have been pronounced by the Egyptian antiquary to be of an extreme and patriarchal age. The architect, without visiting and examining the monuments himself, and without citing the evidence for this extreme antiquity, has assumed the antiquary's dictum to be indisputable; and finding an extraordinary resemblance between some of the characteristic features of the Greek Doric and those of these monuments, he proceeds to argue, that in these tombs we have the type of the national style of Greece; or, rejecting this hypothesis as impossible, he maintains the contrary opinion, that the resemblance, though striking, is fortuitous.

But it is clear that a preliminary and most important point is to determine the real age of the monuments; and in doing so I believe we shall find numerous and unmistakeable arguments that their age has been strangely miscalculated, and that instead of being of the patriarchal epoch assigned to them, they are of an age not long anterior to the conquest of Egypt by Alexander, and therefore long subsequent to the age of Pericles and the Parthenon. These arguments may be referred to two heads—1st, those deduced from the style of architecture and painting; 2nd, those drawn from a comparison of the hieroglyphic inscriptions.

1st. From the architecture. The columns of Beni Hassan which so strikingly resemble the Doric of Greece never occur in any of the great works of Egypt. They are only found in a few rock-hewn tombs, and in two or three small temples that have been repaired at a very late period. If the Greeks had indeed borrowed their architecture from Egypt, should we not have found its prototype in those vast temples and palaces raised in the palmy days of her power and monumental magnificence? These tombs of Beni Hassan have porticoes leading to the inner chambers. Such porticoes are never found in the early tombs at Thebes. The columns within are tall and slender—those in the ancient tombs are square and very massive. The walls are coated with a stucco coloured to imitate granite; but imitative stones and woods always indicate a highly artificial, not a primitive age. The cornice of the portico, instead of the large *cassette*, which is an characteristic of Egyptian art, has a flat projection supported by reeds or lotuses; and in this respect it is absolutely unique in Egypt. Not a single other example of the kind can be found throughout the valley of the Nile. Now so imagine that such a singular coincidence with a characteristic feature of Greek architecture should have occurred by chance, is contrary to all the analogies of art. Shall we then conclude that this solitary example was the type from which the Greek cornice was developed? It were equally reasonable to conclude when we light upon an architectural member in Syria having no resemblance to anything commonly found in eastern buildings, but frequent in our own Gothic works, that it had been introduced into Europe from the east, rather than that it was indigenous here and transplanted thither. We are compelled, then, to conclude that this moulded cornice was borrowed from Greece; and if the cornice, so also the columns. To complete this class of proofs, we find columns similar to those of Beni Hassan employed in a small temple at Thebes, with an inscription stating that the edifice was restored during the reign of Achoris, or about half a century before the rule of the Ptolemies. It may, perhaps, be urged that these columns formed part of the original work;—but the objection is answered by the fact that they are built of stones which had themselves formed part of an earlier edifice, as is attested by the existence upon them of hieroglyphics reversed, dating from about the seventh century B. C.

The style of the paintings on the walls of the tombs is not less indicative of a late date than the architecture. The figures have none of that spareness and lackness of limb which always distinguishes the works of the early artists. They are also in a much better state of preservation than the paintings of the Royal tombs at Thebes, although the hypothesis I am combating would make them of much older date than these.

11. The second class of proofs of the comparatively modern date of the tombs of Beni Hassan, is supplied by the hieroglyphics painted upon the walls. The inscriptions on these walls are very lengthy, and no lengthy hieroglyphic inscription has ever yet been satisfactorily interpreted, nor will be until the knowledge of the ancient language of Egypt has advanced far beyond its present limits. Still whatever evidence is furnished by the inscriptions, appears at first sight to establish the extreme antiquity of these works; indeed, the assumption of their high antiquity rests solely upon such evidence, for here we find the name of OSIRTAEN, a very ancient king. But first it may be observed that the mere presence of an ancient name is no proof of the coeval antiquity of the building. Thus the columns of the little temple of Medinet Habou, at Thebes above referred to, though bearing reversed hieroglyphics of the present dynasty of the Ptolemies, are inscribed with the name of Thothmes III, who reigned nearly a thousand years before. It may be required, however, that we should offer some reasonable account of the presence of the name of Osirtasen on the Beni Hassan tomb. And such an account may be furnished, and thus all the anomalies of the case be explained.

Those who have paid any attention to the subject are well aware that in the hieroglyphic

inscriptions every Pharaoh is commonly introduced with two names, each inscribed in an oval ring; that each name is preceded by a title never found attached to the other name; and that, as one of the two always precedes the other, it has been distinguished by antiquaries as the *pre-nomen*. The second name is phonetic, the characters having an alphabetic value, and together expressing the proper name of the king, as RAMSES OSIRTAEN, &c. The first oval, or *pre-nomen*, was supposed merely to express the peculiar titles assumed by the individual monarch who bore it. But I have demonstrated from an examination of the *pre-nomen* of the Ptolemies (with whose descent and lineage we are familiar) that the *pre-nomen* expressed much more than this. It may be compared to a modern coat of arms. In it were blazoned the bearings derived from the *pre-nomen*, or coat of the father; and it indicated his claim to the throne inherited with the right of quartering the arms.* Now it is very remarkable that Nectanebo, of the last of the dynasties of Pharaohs, B. C. 379, assumed the *pre-nomen* of this ancient king, OSIRTAEN. To do this was equivalent to claiming descent from him; and as Nectanebo was the founder of a new dynasty, it is not improbable that his claim to the throne rested upon his real or imaginary descent from this ancient monarch. If so, what was more natural than the introduction of his name in an inscription? I feel no doubt, then, that these much-talked-of tombs of Beni Hassan were the work of the late age of Nectanebo, forty-eight years before the conquest of Egypt by the Greeks, and that the name of Osirtasen was introduced as the ancestor of the reigning monarch.

Fortunately, we have an independent proof of a similar proceeding in another case. Piny mentions a certain obelisk as having been hewn out by this Nectanebo, and set up by one of the Ptolemies at Arsinoe; and that the apex was subsequently cut to receive a metal ornament, no doubt similar to those now seen on the obelisks at Rome. At the present day there exists in the very locality he points out an obelisk actually cut at the apex as if to receive the metallic ornament proposed. We cannot hesitate, then, to conclude it to be the one he alludes to. But this obelisk, which he attributes to Nectanebo (to whom I refer the Beni Hassan tomb), is, like the tomb, inscribed with the name of the old king OSIRTAEN, to whom the tomb has been hitherto referred; and this ancient name is preceded by the title, "Good God," a title which I have observed to be usually applied to deceased monarchs. No reasonable doubt, then, can remain that the obelisk was, as Piny says, hewn out by Nectanebo, and inscribed to his ancestor, OSIRTAEN, as recorded on the obelisk itself. And if the obelisk is to be given to Nectanebo, the tombs of Beni Hassan cannot but be inscribed to him too.

Instead, then, of referring them, with Wilkinson and others, to the patriarchal age of Joseph, and imagining that we behold depicted on the walls the presentation to Pharaoh of the prime minister's eleven brethren, we must assign to them the more moderate age of B. C. 370; and having established this fundamental fact, innumerable historic and archaeological difficulties immediately disappear. We have here columns much like those used in Greece. Instead of, with Champollion and others, beholding in this remote and rare example the prototypes of the magnificent architecture of Greece, we have merely a humble imitation of the temples with which Greece was then studded over, for Pericles had already ruled, and Pindus had already wrought. And what more outcome? For in this age there was constant communication between Egypt and Greece. On the walls of the chambers of the tombs are depicted the trades, games, and amusements of a very advanced and highly artificial age; curious feats of agility, grand banquets, and elaborate musical entertainments. However strange this may appear when assumed of the early age of Joseph, it is just what we might have expected in the reign of Nectanebo, when Egypt was emphatically an old country, and the people had been a polished community for more than a thousand years.

G. H. WATKIN.

* To be continued.

* See "Arts and Antiquities of Ancient Egypt," by G. H. Watkin.